Revised: Sep 2005

ALLERGIC / NONALLERGIC RHINITIS (ICD9 477 / 477.9)

AEROMEDICAL CONCERNS: Allergic rhinitis is a common upper respiratory condition with a potential for causing significant medical incapacitation in flight personnel. Rhinitis is not usually disabling but is a distraction possibly causing significant periods of down time and, thus, reduced operational effectiveness. The reduced sense of smell could be hazardous in the cockpit. Congestion and swelling of the nasal passages could interfere with the movement of air and result in airway compromise, discomfort, the use of medications with unacceptable side effects (i.e., drowsiness), ear and sinus barotrauma with potential for in-flight incapacitation.

WAIVER:

Initial Class 1A/1W Applicants:
Mild seasonal or perennial allergic rhinitis, treated successfully with short acting decongestants, non-sedating antihistamines, leukotriene modifiers, and/or intranasal steroids without side effects or adverse reactions will be recorded as *information only*. Exception to policy must be requested for initial flight applicants who have required systemic steroids, immunotherapy within a 5-year period to application, or have a history of sinus surgery to include polyp removal.

Initial Classes 2, 3 & 4 Applicants:
Mild seasonal or perennial allergic rhinitis treated successfully with short acting decongestants, non-sedating antihistamines, leukotriene modifiers, and/or intranasal steroids will be recorded as *information only*. Exception to policy/waiver must be requested for initial flight applicants who had required systemic steroids, immunotherapy within the past 5 years, or had a history of sinus surgery to include polyp removal.

Rated Aviation Personnel (All Classes):
Mild seasonal or perennial allergic rhinitis treated successfully with short acting decongestants, non-sedating antihistamines, leukotriene modifiers, and/or intranasal steroids will be recorded as *information only*. A waiver will be required if the condition is controlled by immunotherapy, required systemic steroids, or specialty care, as long as there are no significant adverse effects. (See Medications APL)

INFORMATION REQUIRED: All requests for exception to policy or waiver should include:

- ❑ Brief AMS – to include major symptoms, duration and frequency of symptoms, medications or treatments used in the past, environmental triggers (e.g. animals, pollens, cold, altitude changes, etc.), and any smoking history
- ❑ Allergy skin testing if indicated or done in conjunction with work-up for education or immunotherapy.
- ❑ ENT and allergy evaluations in cases of prolonged or moderate-to-severe symptoms should be included, if consultation was requested or surgery was recommended.

FOLLOW-UP: None required unless symptoms worsen with significant impact on aircrew readiness.

TREATMENT:

- *Antihistamines* — Fexofenadine (Allegra), and Loratadine (Claritin), (all other antihistamines are Class 4-non-waiverable, including Cetirizine (Zyrtec)). This is the recommended first line treatment for mild disease.
- *Leukotriene Modifiers*—Montelukast (Singulair)
- *Intranasal Steroids* — Dexamethasone (Dexacort), Flunisolide (Nasarel or Nasalide), Beclomethasone (Beconase, Beconase AQ, Vancenase, Vancenase AQ DS), Budesonide (Rhinocort), and Triamcinolone (Nasacort or Nasacort AQ), Fluticasone (Flonase), and

Mometasone (Nasonex). This is the recommended first line treatment for moderate disease. (See Medications APL)

- *Short acting decongestants* – use as needed.
- *Intranasal Cromolyn sodium (Nasalcrom)* —This is effective, but requires frequent (qid) dosing.
- *Intranasal Anticholinergics* — Ipatropium bromide (Atrovent) 0.03% nasal spray is effective when rhinorrhea is the predominant symptom. It is not very helpful for relieving congestion, itchy watery eyes or sneezing.
- *Immunotherapy* — may be used while the aviator remains on flight status provided he (or she) remains relatively asymptomatic without the use of antihistamines. Occasional sudafed or use of an intranasal steroid is permitted. Aviation personnel should be grounded 12 hours following immunotherapy injection or for the duration of local or systemic reaction. (AR 40-8, Temporary Flying Restrictions due to Exogenous Factors, paragraph 4 b, August 1976) The accelerated method of reaching maintenance immunotherapy (Rush technique) can be used and should be considered to minimize grounding time.
- *Allergy testing* – Consider allergy testing if no response to therapeutic course of antihistamines/intranasal steroids after 30-90 days of treatment or for patient education for control of trigger exposure.

DISCUSSION: Rhinitis is an inflammation of the nasal passages which can be subdivided into two major categories: Allergic and Nonallergic. Allergic rhinitis can be either seasonal or year round and can be characterized by any or all of the following symptoms: rhinorrhea, nasal congestion, sneezing, nasal or ocular pruritus and lacrimation. Seasonal allergic rhinitis is caused by an IgE medicated reaction to seasonal aeroallergens, typically tree, grass and /or weed pollens as well as molds. Perennial allergic rhinitis is a year round condition also due to an IgE mediated reaction to aeroallergens which primarily include dust mites, animal allergens and molds. Intranasal steroids and cromolyn have minimal side effects and are approved for use in aviation personnel. Nonallergic rhinitis may consist of nasal congestion, sneezing, and rhinorrhea. The congestion is often seen as alternating, with sometimes severe nasal obstruction. Inciting factors include temperature and humidity changes, odors, irritants, recumbency, and emotion. Treatment of nonallergic rhinitis with inhaled nasal steroids can be effective; and if symptoms are not disabling, no waiver is required. Daily antihistamine use is not recommended for treatment of nonallergic rhinitis.

The diagnosis rests primarily on history (time of day, seasonal variation of symptoms, frequency and duration of episodes, environmental factors such as home or work exposures, whether symptoms improve with altitude or humidity and if there are any triggers such as MSG, pollen, smoke, cold weather, physical exertion). Further evaluation is indicated if symptoms are severe and do not respond to medical therapy. Sinus CT scans or rhinoscopy would be part of a more in-depth evaluation. Allergy skin prick testing is the most sensitive test for identifying specific allergies. It is simple and inexpensive. RAST testing is a good screening test to help with identifying suspected triggers. Total IgE or eosinophil counts are not good screening tests and therefore are not recommended.

Well controlled, medical managed rhinitis, without aeromedical side effects or complications, requires no AMS and will be noted on the FDME/FDHS as *Information Only*.

REFERENCES:

Dykewicz, MS, Fineman, S, et al. Diagnosis and Management of Rhinitis: Parameter Documents of the Joint Task Force on Practice Parameters in Allergy, Asthma, and Immunology. Annals of Allergy, Asthma, Immunology 1998; 81: 463-518.
Allergic or Nonallergic Rhinitis? Taking the Questions Out of Diagnosis and Treatment. Video CME program. Leawood, Kan.: American Academy of Family Physicians, May 2003.